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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,340

05/15/2006

Koichi Yoshihara

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EXAMINER

PRICE, CRAIG JAMES

ART UNIT

PAPER NUMBER

3753

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,340	Applicant(s) YOSHIHARA, KOICHI	
	Examiner Craig Price	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/16/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Abstract

1. The abstract of the disclosure is objected to because, the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Reference numbers must be in parentheses. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP 608.01(b).

Drawings

2. The drawings are objected to because the details of the drawing are difficult to discern in figures 1, 2c, 3 and 4. The examiner requests new views for each of the figures listed, for clarity purposes. Figures 1, 3 and 4 would best be shown on separate sheets at approximately twice the current scale and with original drawing quality, fitted for 8.5" X 11" size paper. Furthermore, the drawings are unclear as to where the seal diameters X and Y are indicating that the seal interfaces.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. **Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d).** If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Figures 5 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. **The replacement sheet(s) must be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures.** If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation “to keep balance with the second valve body

portion opened” is unclear. Is this limitation meant recite “to keep balance when the second valve body is opened”? Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakata et al. (5,443,561).

Sakata et al. disclose a float valve, characterized in comprising, a case having a space formed inside. A connection hole (12) that is formed on a side surface or on a bottom surface of the case to connect inside and outside of the case. A first valve port (6) that is formed on an upper surface of the case. A second valve port (7) that is formed on the upper surface of the case to have a larger diameter (the through bore of 7 below 10 is larger than the bore of 6) than that of the first valve port. A float (8, 8') to be housed in the case to freely move therein. A first valve body portion (the tapered end of 8' near 6) that is formed on an upper surface of the float to close the first valve port. A sub float (9) through which the first valve body portion goes and is covered over the upper surface of the float. A second valve body portion (9a) that is formed on an upper surface of the sub float to close the second valve port. See figure 3.

Regarding claim 2, as best understood, Sakata et al. disclose a spring (15) that biases upward the sub float in such a manner as to keep balance “with the second valve

body portion opened”.

Regarding claim 3, Sakata et al. disclose a spring (15) that biases upward the sub float in such a manner as not to add a load from the sub float to the float.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nobuharu et al. (JP 2002-115613).

Nobuharu et al. disclose a float valve, characterized in comprising, a case having a space formed inside. A connection hole (35) that is formed on a side surface or on a bottom surface of the case to connect inside and outside of the case. A first valve port (36A) that is formed on an upper surface of the case. A second valve port (36B) that is formed on the upper surface of the case to have a larger diameter than that of the first valve port. A float (34) to be housed in the case to freely move therein. A first valve body portion (39A) that is formed on an upper surface of the float to close the first valve port. A sub float (39B) through which the first valve body portion goes and is covered over the upper surface of the float. A second valve body portion (the face portion of 39B sealing the openings 36A and 36 B) that is formed on an upper surface of the sub float to close the second valve port. See figure 3.

Regarding claim 2, as best understood, Nobuharu et al. disclose a spring (the spring between the floats) that biases upward the sub float in such a manner as to keep balance “with the second valve body portion opened”, as shown in figure 3.

8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshihara (JP 2003-185046).

Yoshihara discloses a float valve, characterized in comprising, a case having a space formed inside. A connection hole (2A) that is formed on a side surface or on a bottom surface of the case to connect inside and outside of the case. A first valve port (3b) that is formed on an upper surface of the case. A second valve port (3A) that is formed on the upper surface of the case to have a larger diameter than that of the first valve port. A float (9) to be housed in the case to freely move therein. A first valve body portion (22) that is formed on an upper surface of the float to close the first valve port. A sub float (8) through which the first valve body portion goes and is covered over the upper surface of the float. A second valve body portion (14,17) that is formed on an upper surface of the sub float to close the second valve port. See figures 1 and 2.

Regarding claim 2, as best understood, Yoshihara disclose a spring (10) that biases upward the sub float in such a manner as to keep balance “with the second valve body portion opened”.

Regarding claim 3, Yoshihara disclose a spring (10) that biases upward the sub float in such a manner as not to add a load from the sub float to the float.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Szlaga (5,065,782), Harris (5,261,439), Benjey et al (5,590,697), Nishi et al. (2001/0050104) and Brock et al. (2002/0144730) all disclose similar float valves.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571)272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP
/C. P./
Examiner, Art Unit 3753

20 February 2008

/John Rivell/
Primary Examiner, Art Unit 3753